



EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), designated as a "notified body" under the terms of the Merchant Shipping (Marine Equipment) Regulations 2016 (S.I. 2016 No.1025), did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Fire protection equipment requirements of Marine Equipment Directive (MED) 2014/90/EU and Commission Implementing Regulation (EU) 2017/306 indicating design, construction and performance requirements and testing standards for marine equipment, subject to any conditions in the Design Appraisal Document attached hereto.

Manufacturer (Applicant)	Dafo Fomtec AB
Address	P.O. Box 683 SE - 135 26 Tyresö Sweden
Reference	Regulation 2017/306
Regulation Item (No & Item designation)	MED/3.58 - FIXED LOW EXPANSION FOAM FIRE EXTINGUISHING SYSTEMS COMPONENTS FOR MACHINERY SPACES & TANKER DECK PROTECTION
Product Type	FOAM CONCENTRATE
Product Description	Fire Extinguishing "Type B" Synthetic Low Expansion Foam Concentrate – Types: "AFFF 1%F, 3% & 6%" for use on hydrocarbon fires
Specified Standard	IMO MSC.1/Circular 1312

The attached Design Appraisal Document (schedule) forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue 7 August 2017 Expiry date 6 August 2022

Certificate No. MED 1750147

Signed

Sheet No. 1 of 3

Name

S. Abraham
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038

Note:

This certificate is issued under the authority of the MCA.

This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.

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Page 2 of 3
Document number MED 1750147
Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 7 August 2017	Quote this reference on all future communications SOUTSO/SFS/TA/KT/SA/WP28673804
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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1750147

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

APPROVAL DOCUMENTATION

Lloyds Register Helsingborg Witness Certificates; HBG 1210047/3, HBG 1210047/4 and HBG 1210047/5, all dated 29 June 2012 for testing conducted at the Falck Nutek Test Facility, Esbjerg, Denmark.

CONDITIONS OF CERTIFICATION

1. Foam concentrate type "AFFF": When used in 1%, 3% and 6% maximum concentration and as-tested expansion ratios of 7:1, 7:1 and 8:1 respectively, in suitable equipment for Class B hydrocarbon fires in machinery spaces and tanker deck protection
2. The foam concentrates should be stored above their freezing temperature as per the following:

Foam Type	Foam Concentrate	Freezing Temperature (°C)	Storage Temperature Range (°C)
AFFF 1%	Synthetic Film	-15	-14 to 55
AFFF 3%	Forming Foam	-5	-4 to 55
AFFF 6%		-3	-2 to 55

3. The storage container should be compatible with the foam concentrates throughout the service life of the foam
4. Periodical testing of foam concentrates for hydrocarbon fires should be carried out in accordance with Annex 4 and 5 of IMO MSC.1/Circ.1312, not more than 3 years after being supplied to the ship and after that, every year, by independent laboratories or authorised service suppliers acceptable to the Administration
5. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D), a Product-Quality assurance system (Module E) or a Product Verification Process (Module F). The wheelmark cannot be affixed to the product until a conformity assessment module is in place
6. Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place



Lloyd's
Register

Lloyd's Register Verification Limited

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Page 3 of 3
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PLACE OF PRODUCTION

Dafo Fomtec AB
Garnisonsgatan 47A
254 66 Helsingborg
Sweden


Lloyd's Register Verification Ltd 

Saji Abraham
Senior Specialist
Statutory Fire & Safety
Southampton Technical Support Office, Marine & Offshore
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038

**NOTIFIED BODY CERTIFICATE
TRANSFER OF RESPONSIBILITY**  Lloyd's Register

Certificate No: 0525-MED-DE-MED 1750147

This certificate transfers Lloyd's Register Verification Ltd. (0038)
Certificate No: MED 1750147
Issued on: 07 August 2017
to the responsibility of EU Notified Body No. 0525
(Lloyd's Register Deutschland GmbH)

Date of Original Certificate: 07 August 2017
Date of Current Certificate: 31 December 2020
Date of Certificate Expiry: 06 August 2022

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